



## BASIC MANUAL

VHF/UHF DUAL BAND  
TRANSCEIVER

# IC-T10

---

---

---

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

**WARNING:** MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

---

Icom Inc.

---

Thank you for choosing this Icom product.  
This product is designed and built with Icom's state of the art technology and craftsmanship.  
With proper care, this product should provide you with years of trouble-free operation.

## ■ Important

**READ ALL INSTRUCTIONS** carefully and completely before using the transceiver.  
**SAVE THIS INSTRUCTION MANUAL** — This instruction manual contains important operating instructions for the transceiver.

For Advanced features and instructions, see the **ADVANCED MANUAL** on the Icom website for details.

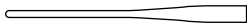
<https://www.icomjapan.com/support/>

## ■ Explicit definitions

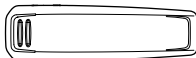
WORD	DEFINITION
⚠ <b>DANGER!</b>	Personal death, serious injury or an explosion may occur.
⚠ <b>WARNING!</b>	Personal injury, fire hazard or electric shock may occur.
<b>CAUTION</b>	Equipment damage may occur.
<b>NOTE</b>	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

## ■ Supplied accessories

Antenna



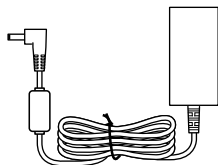
Belt clip



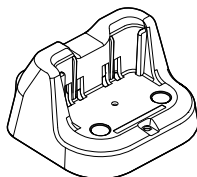
Battery pack



Power adapter



Battery charger



**NOTE:** Some accessories are not supplied, or the shape is different, depending on the transceiver version.

---

## ■ Precautions

⚠ **DANGER! NEVER** operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere. This could cause an explosion and death.

⚠ **DANGER! NEVER** use or charge Icom battery packs with non-Icom transceivers or non-Icom chargers. Only Icom battery packs are tested and approved for use with Icom transceivers or charged with Icom chargers. Using third-party or counterfeit battery packs or chargers may cause smoke, fire, or cause the battery to burst.

⚠ **WARNING RF EXPOSURE!** This transceiver emits Radio Frequency (RF) energy. Extreme caution should be observed when operating this transceiver. If you have any questions regarding RF exposure and safety standards, please refer to the Federal Communications Commission Office of Engineering and Technology's report on Evaluating Compliance with FCC Guidelines for Human Radio Frequency Electromagnetic Fields (OET Bulletin 65).

⚠ **WARNING! NEVER** hold the transceiver so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting.

⚠ **WARNING! NEVER** operate or touch the transceiver with wet hands. This could cause an electric shock or damage the transceiver.

⚠ **WARNING! NEVER** operate the transceiver with earphones, a headset, or other audio accessories at high volume levels. If you experience a ringing in your ears, reduce the volume or discontinue use.

⚠ **WARNING! NEVER** connect the transceiver to a power source of more than 16 V DC or use reverse polarity. This could cause a fire or damage the transceiver.

**CAUTION: DO NOT** short the terminals of the battery pack. Shorting may occur if the terminals touch metal objects such as a key, so be careful when placing the battery packs (or the transceiver) in bags, and so on. Carry them so that shorting cannot occur with metal objects. Shorting may damage not only the battery pack but also the transceiver.

**CAUTION: DO NOT** operate the transceiver unless the flexible antenna, battery pack, and jack cover are securely attached to the transceiver and that the antenna and battery pack are dry before attachment. Exposing the inside of the transceiver to dust or water will result in serious damage to the transceiver. After exposure to water, clean the battery contacts thoroughly with fresh water and dry them completely to remove any water or salt residue.

**CAUTION: DO NOT** operate the transceiver while driving a vehicle. Safe driving requires your full attention—anything less may result in an accident.

**CAUTION: DO NOT** use harsh solvents such as benzine or alcohol when cleaning. This could damage the equipment surfaces. If the surface becomes dusty or dirty, wipe it clean with a soft, dry cloth.

**CAUTION: DO NOT** place or leave the transceiver in direct sunlight or in areas with temperatures below  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) or above  $+60^{\circ}\text{C}$  ( $+140^{\circ}\text{F}$ ).

**CAUTION: DO NOT** operate the transceiver if it becomes hot after continuously transmitting for long periods of time. This may damage the transceiver.

**NEVER** place in an insecure place to avoid inadvertent use by unauthorized persons.

**DO NOT** push PTT unless you actually intend to transmit.

## ■ Precautions (Continued)

**BE CAREFUL!** The transceiver meets IP67\* requirements for dust tight and waterproof protection. However, once the transceiver has been dropped, waterproof protection cannot be guaranteed because of possible damage to the transceiver's case or waterproof seal.

\* Only when the battery pack, flexible antenna, and jack cover are attached.

Even when the transceiver power is OFF, a slight current still flows in the circuits. Remove the battery pack from the transceiver when not using it for a long time. Otherwise, the installed battery pack will become exhausted and will need to be recharged or replaced.

## ■ Battery cautions

### ◇ Battery caution

Misuse of Li-ion batteries may result in the following hazards: smoke, fire, or the battery may rupture. Misuse can also cause damage to the battery or degradation of battery's performance.

⚠ **DANGER! NEVER** incinerate used battery packs. Internal battery gas may cause an explosion.

⚠ **DANGER! NEVER** strike or otherwise impact the battery pack. Do not use the battery pack if it has been severely impacted or dropped, or if the pack has been subjected to heavy pressure. Battery pack damage may not be visible on the outside of the case. Even if the surface of the battery does not show cracks or any other damage, the cells inside the battery may rupture or catch fire.

⚠ **DANGER! NEVER** leave the battery pack in places with temperatures above 60°C (140°F). A High-temperature buildup in the battery cells, such as could occur near fires or stoves, inside a sun-heated vehicle, or in direct sunlight for long periods of time, may cause the battery cells to rupture or catch fire. Excessive temperatures may also degrade the pack's performance or shorten the battery cell's life.

⚠ **DANGER! NEVER** place battery packs near a fire. Fire or heat may cause them to rupture or explode. Dispose of used battery packs in accordance with local regulations.

⚠ **DANGER! NEVER** solder the battery terminals, or **NEVER** modify the battery pack. This may cause heat generation, and the battery may burst, emit smoke or catch fire.

⚠ **DANGER! NEVER** let fluid from inside the battery get in your eyes. This can cause blindness. Rinse your eyes with clean water, without rubbing them, and immediately go to a doctor.

⚠ **WARNING! NEVER** use deteriorated battery packs. They could cause a fire.

⚠ **WARNING! NEVER** let fluid from inside the battery cells come in contact with your body. If it does, immediately wash with clean water.

⚠ **WARNING! NEVER** put the battery pack in a microwave oven, high-pressure container, or in an induction heating cooker. This could cause a fire, overheating, or cause the battery cells to rupture.

**CAUTION: DO NOT** expose the battery pack to rain, snow, saltwater, or any other liquids. Do not charge or use a wet pack. If the pack gets wet, be sure to wipe it dry cloth before using.

**CAUTION: DO NOT** use the battery if it emits an abnormal odor, heats up, or is discolored or deformed. If any of these conditions occur, contact your Icom dealer or distributor.

**CAUTION: DO NOT** use the battery pack out of the specified temperature range  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$  ( $-4^{\circ}\text{F} \sim +140^{\circ}\text{F}$ ). Using the pack out of this range will reduce the pack's performance and battery cell life.

**CAUTION: DO NOT** leave the pack fully charged, completely discharged, or in an excessive temperature environment (above  $50^{\circ}\text{C}$ ,  $122^{\circ}\text{F}$ ) for an extended period of time. Otherwise, a shorter battery pack life could occur. If the battery pack must be left unused for a long time, it must be detached from the transceiver after discharging. You may use the pack until the remaining capacity is about half, then keep it safely in a cool, dry place in the following temperature range:

$-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ )  $\sim$   $+50^{\circ}\text{C}$  ( $+122^{\circ}\text{F}$ ) (within a month).

$-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ )  $\sim$   $+40^{\circ}\text{C}$  ( $+104^{\circ}\text{F}$ ) (within three months).

$-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ )  $\sim$   $+20^{\circ}\text{C}$  ( $+68^{\circ}\text{F}$ ) (within a year).

**BE SURE** to replace the battery pack with a new one approximately five years after manufacturing, even if it still holds a charge. The material inside the battery cells will become weak after a period of time, even with little use. The estimated number of times you can charge the pack is between 300 and 500. Even when the pack appears to be fully charged, the operating time of the transceiver may become short when:

- Approximately five years have passed since the pack was manufactured.
- The pack has been repeatedly charged.

## ◇ Charging caution

⚠ **DANGER! NEVER** charge the battery pack in areas with extremely high temperatures, such as near fires or stoves, inside a sun-heated vehicle, or in direct sunlight. In such environments, the safety/protection circuit in the pack will activate and stop the charging.

⚠ **DANGER! NEVER** charge the transceiver during a lightning storm. It may result in an electric shock, cause a fire, or damage the transceiver. Always disconnect the power adapter before a storm.

⚠ **WARNING! NEVER** charge or leave the battery in the battery charger beyond the specified time for charging. If the pack is not completely charged by the specified time, stop charging and remove it from the battery charger. Continuing to charge the pack beyond the specified time limit may cause a fire, overheating, or the battery may rupture.

⚠ **WARNING!** Occasionally observe the battery pack condition while charging. If any abnormal condition occurs, discontinue using the battery pack.

**CAUTION: DO NOT** insert the transceiver with the battery pack attached into the charger if it is wet or soiled. This could corrode the battery charger terminals or damage the charger. The charger is not waterproof.

**CAUTION: DO NOT** charge the battery pack outside of the specified temperature range:  $0^{\circ}\text{C} \sim 60^{\circ}\text{C}$  ( $32^{\circ}\text{F} \sim 140^{\circ}\text{F}$ ). Icom recommends charging the pack at  $25^{\circ}\text{C}$  ( $77^{\circ}\text{F}$ ). The pack may heat up or rupture if charged out of the specified temperature range. Additionally, battery performance or battery life may be reduced.

**CAUTION: DO NOT** use the battery charger unless the power outlet is easily accessible and near the unit. Remove it from the AC power outlet when not in use.

---

## ■ FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Changes or modifications to this device, not expressly approved by Icom Inc., could void your authority to operate this device under FCC regulations.

## ■ Recommendation

**CLEAN THE TRANSCEIVER THOROUGHLY IN A BOWL OF FRESH WATER** after exposure to saltwater, and dry it before operating. Otherwise, the transceiver's keys, switches, and controllers may become unusable, due to salt crystallization, and/or the charging terminals of the battery pack may corrode.

**NOTE:** If the transceiver's waterproof protection appears defective, carefully clean it with a soft, damp (fresh water) cloth, then dry it before operating. The transceiver may lose its waterproof protection if the case, jack cap, or connector cover is cracked or broken, or the transceiver has been dropped. Contact your Icom distributor or your dealer for advice.

## ■ Trademarks

Icom, Icom Inc. and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries.

Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:

- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, or other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom transceivers with any equipment that is not manufactured or approved by Icom.

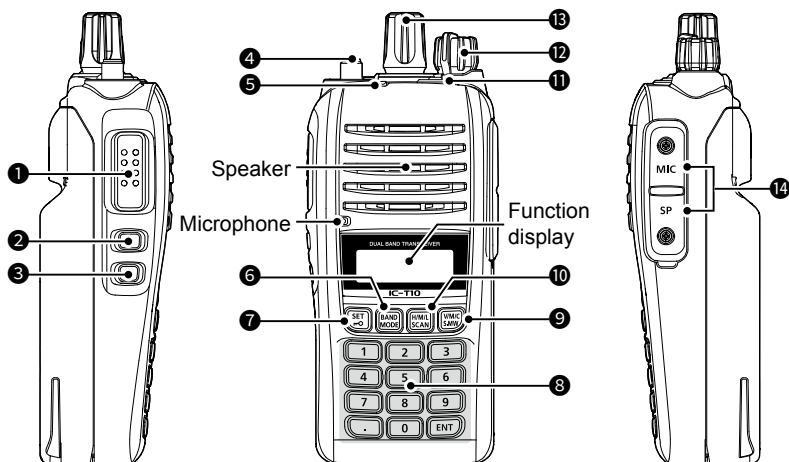
---

## ■ Table of contents

# 1

## PANEL DESCRIPTION

### ■ Front, top, and side panels



#### 1 PTT SWITCH [PTT]

Hold down to transmit, release to receive.

#### 2 SQUELCH KEY [SQL] (p.XX)

- While holding down, rotate [DIAL] to adjust the squelch level.
- Hold down to temporarily open the squelch and monitor the operating frequency.

#### 3 PROGRAMMABLE KEY [P] (p.XX)

- Push to execute the function assigned to the key. (p. XX)

#### 4 ANTENNA CONNECTOR

Connect the supplied antenna.

#### 5 TX/RX INDICATOR

Lights red while transmitting.  
Lights green while receiving a signal, or when the squelch is open.

#### 6 BAND • MODE KEY [BAND]/[MODE]

- Push to toggle the operating band. (p. XX)
- Hold down to toggle the operating mode (p. XX).

#### 7 SET MODE • LOCK KEY [SET]/[ $\Gamma$ -O]

- Push to enter the Set mode. (p. XX)
- Hold down for 1 second to turn the Lock function ON or OFF. (p. XX)

#### 8 Ten-keypad (p. XX)

#### 9 VFO/MEMORY/CALL CH • SELECT MEMORY WRITE KEY [V/M/C]/[S/M/W]

- Push to toggle between the VFO mode, Memory mode, and Call Channel mode.
- Hold down for 1 second to enter the Memory write mode.

#### 10 HIGH/MIDDLE/LOW • SCAN KEY

- Push to toggle the output power.
- Hold down for 1 second to enter the Scan Type Selection mode.



- 11 HOME KEY [HOME] (p. XX)**  
 Push to directly select the Call channel.
- 12 VOLUME • POWER SWITCH [VOL]**

  - Rotate to turn the transceiver ON or OFF.
  - Rotate to adjust the audio output level.
- 13 CONTROL DIAL [DIAL]**

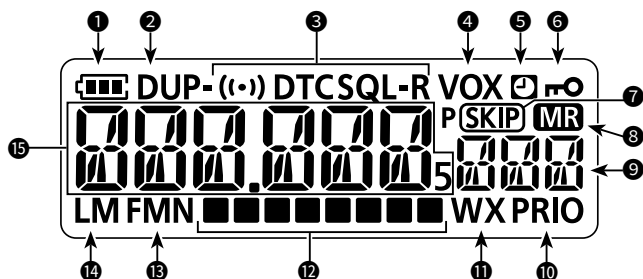
  - Rotate to select an operating frequency. (p. XX)
  - In the Memory mode, rotate to select a Memory channel.
  - Rotate to select a setting item or value.
  - In the Character Entry mode, rotate to enter characters.
- 14 EXTERNAL MICROPHONE • SPEAKER JACK [MIC/SP]**  
 Connect an optional speaker microphone or headset.  
 (SP: 3.5 mm (1/8 inch), MIC: 2.5 mm)

  - ① Confirm that the transceiver is OFF before connecting or disconnecting optional equipment.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

# 1 PANEL DESCRIPTION

## ■ Function display



### ① BATTERY ICON (p. XX)

Displays the current capacity of the attached battery pack.

### ② DUPLEX ICON

- “DUP” is displayed when plus duplex is selected.
- “DUP-” is displayed when minus duplex is selected.

① No icon is displayed when simplex is selected.

### ③ TONE ICONS

Displayed when the Tone function is turned ON, and indicates which Tone function is in use.

### ④ VOX ICON (p. XX)

Displayed when the VOX function is ON.

### ⑤ AUTO POWER OFF ICON (p. XX)

Displayed when the Auto Power OFF function is ON.

### ⑥ KEY LOCK ICON (p. XX)

Displayed when the Key Lock function is ON.

### ⑦ SKIP ICON

Displayed when the selected memory channel is set as a skip channel.

### ⑧ MEMORY ICON (p. XX)

Displayed when the Memory mode is selected.

### ⑨ MEMORY CHANNEL NUMBER

• Displays the selected memory channel number (p. XX).

- “C” is displayed when the Call channel is selected.

### ⑩ PRIORITY SCAN ICON (p. XX)

Displayed while the Priority Scan function is ON.

### ⑪ WEATHER ALERT ICON

(For only the USA version)

Displayed when the Weather Alert function is ON.

### ⑫ S/Rf METER

- Displays the relative signal strength of the received signal.
- Displays the output power level of the transmit signal.

### ⑬ OPERATING MODE ICONS (p. XX)

Displays the selected operating mode.

### ⑭ POWER ICONS (p. XX)

Displays the selected output power.

- “L”: Low
- “M”: Medium

① No icon is displayed when the High power is selected.

### ⑮ FREQUENCY READOUT (p. XX)

Displays an operating frequency.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

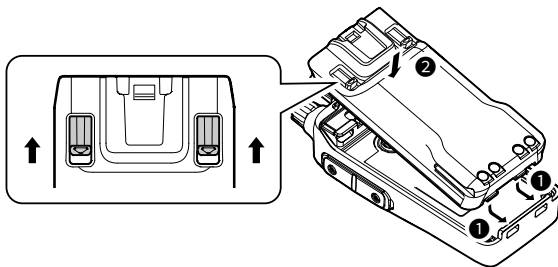
## ■ Attaching the accessories

### ◇ Battery pack

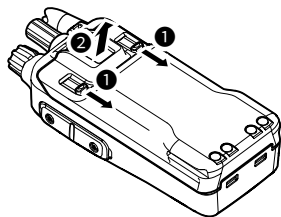
Attach or detach the battery pack or battery case, as illustrated below.

① When attaching, slide the battery pack and hold it down until both latches are locked.

To attach:



To detach:



#### NOTE:

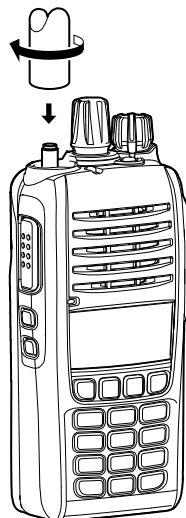
- Even when the transceiver is OFF, a slight current still flows in the circuits. Remove the battery pack or case from the transceiver when not using it for a long time. Otherwise, the attached battery pack or case will become exhausted, and will need to be recharged or replaced.
- When the temperature is around 0°C (32°F) or below, the Battery Protection function automatically sets the transceiver power to Low1 power (0.5 W), and disables power selections High, Mid, and Low2.

### ◇ Antenna

Attach the supplied antenna to the antenna connector. The transceiver has an SMA-type connector.

#### CAUTION:

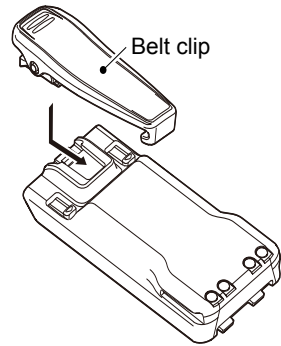
- **DO NOT** carry the transceiver by holding only the antenna.
- **DO NOT** connect an antenna other than the supplied antenna, or those listed in this manual.
- **DO NOT** transmit without an antenna.



## ◇ Belt clip

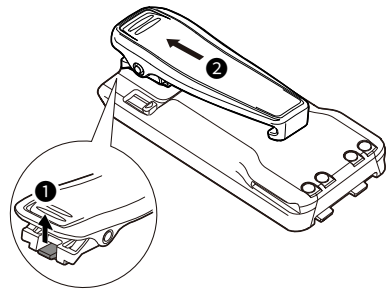
### To attach:

1. Remove the battery pack from the transceiver, if it is attached.
2. Slide the belt clip in the direction of the arrow until the belt clip is locked and makes a 'click' sound.



### To detach:

- Lift the tab up (1), and slide the belt clip in the direction of the arrow (2).



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

## 2 INITIAL SETUP

### ■ Charging the battery pack

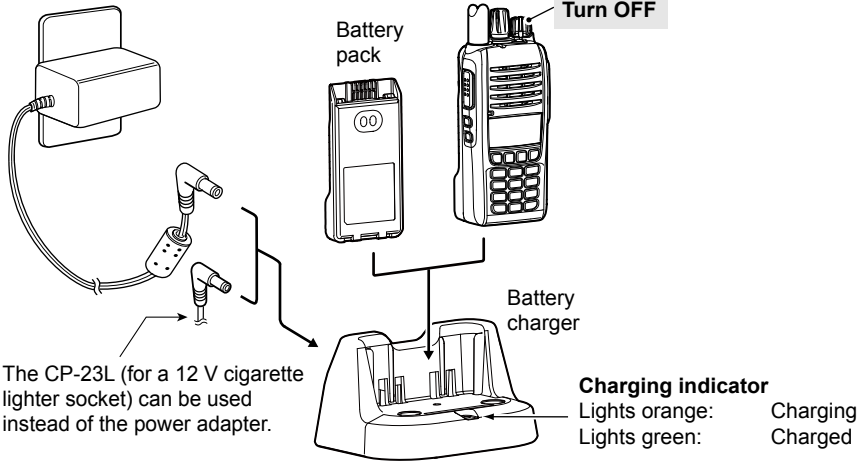
Prior to using the transceiver for the first time, the battery pack must be fully charged for optimum life and operation.

**NOTE: BE SURE** to turn OFF the transceiver while charging with the supplied battery charger. Otherwise, the attached battery pack cannot be charged.

#### Charging time:

Approximately 3 hours for the BP-280

Power adapter\*

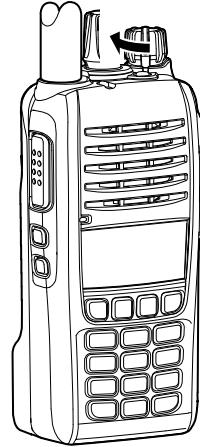


\* May not be supplied, or the shape may be different, depending on the transceiver version.

ICON	BATTERY STATUS
	The battery has sufficient capacity.
	The battery is exhausted a little.
	The battery is nearing exhaustion.
	The battery is almost fully exhausted. Immediately charge the battery pack.

## ■ Turning ON the transceiver

- Rotate [VOL] clockwise to turn ON the transceiver.
  - A beep sounds.
  - After the opening message and voltage are displayed, the operating frequency or repeater name is displayed.
- ① Rotate [VOL] counter-clockwise to turn OFF the transceiver.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

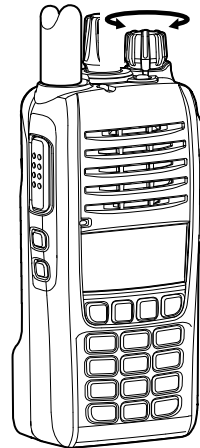
16

17

18

## ■ Adjusting the audio level

- Rotate [VOL] to adjust the audio level.
  - The function display shows the audio level while adjusting.



## ■ Receiving

The following are basic settings for receiving.

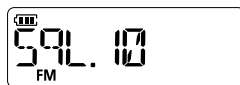
- Adjusting the squelch level (p. 9)
- Selecting the Frequency selecting mode (p. 10)
- Selecting the operating band (p. 11)
- Selecting the operating mode (p. 11)
- Setting a frequency (p. 12)

## ■ Adjusting the squelch level

Noise squelch enables the audio to be heard only while receiving a signal that is stronger than the set level. A higher level blocks weak signals, which enables you to receive only stronger signals. A lower level enables you to hear weak signals.

① Throughout this document, “Noise squelch” is simply called “Squelch.”

1. While holding down [SQL], rotate [DIAL] for a single click to enter the Squelch adjustment mode.
2. While holding down [SQL], rotate [DIAL] to adjust the squelch level.
  - “LEVEL 1” is loose squelch (for weak signals) and “LEVEL 9” is tight squelch (for strong signals).
  - “AUTO” is an automatic level adjustment using a noise pulse counting system.
  - “OPEN” is the continuously open setting.





## ■ Selecting the Frequency selecting mode

The transceiver has frequency selecting modes, as shown below.

### VFO mode:

Rotate [DIAL] to set an operating frequency.

### Memory mode:

Select a Memory channel where an operating frequency and other parameters are saved.

- ① In the Memory mode, "MR" and the Memory Channel number are displayed.

### Call Channel mode:

Select a Call Channel to recall your most-often used frequencies quickly.

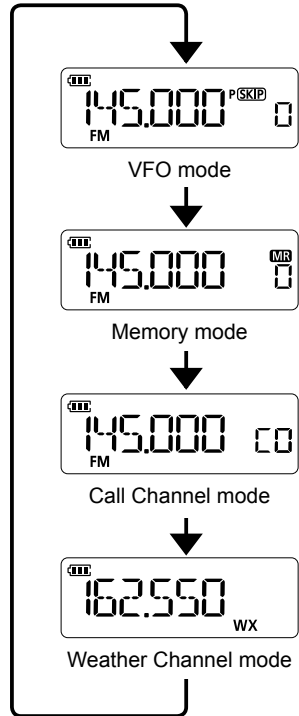
- ① In the Call Channel mode, the Call Channel number is displayed.
- ① While in the VFO mode, push [HOME] to select a Call channel.

### Weather Channel mode (For only the USA version):

Weather Channels are used for monitoring Weather Channels from the National Oceanographic and Atmospheric Administration (NOAA) broadcasts.

- ① In the Weather Channel mode, "WX" is displayed.

1. Push [V/M/C] to toggle the selecting mode, as shown to the right.
2. Rotate [DIAL] to select a frequency or channel.



## ■ Monitor function

The Monitor function is used to listen to weak signals without changing the squelch setting.

- While holding down [SQL], you can hear weak signals on the frequency.

**TIP:** You can set the Monitor Hold function in the Initial Set mode (p. XX). The transceiver opens or closes the squelch each time you push [SQL].



Blinks while using the function

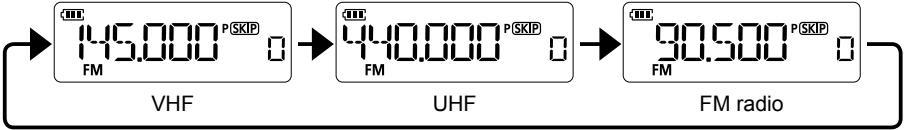
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

## 3 BASIC OPERATION

### ■ Selecting the operating band

Select the operating band in the VFO mode, as shown below.

1. Push [V/M/C] several times to select the VFO mode.
  - The selected frequency is displayed.
2. Push [BAND] to toggle the operating band, as shown below.



### ■ Selecting the operating mode

The transceiver has two operating modes, FM and FM-N.

- Hold down [MODE] for 1 second to toggle the operating mode.
  - ① In the FM-N mode, the TX modulation is automatically set to narrow (approximately  $\pm 2.5$  kHz).
  - ① The FM audio received while in FM-N mode may distort or chop.



### ■ Using the Lock function

The lock function prevents accidental frequency changes and unnecessary function access.

- Hold down [LOCK] until the beep sounds to turn ON or OFF the Key Lock function.
  - "LK" is displayed while the function is ON.
    - ① [PTT], [SQL], [SQL2], [VOL], and the Squelch Adjustment ([SQL] + [DIAL]) can be used even if the Key Lock function is ON.
    - ① Lock [PTT] in the Initial Set mode, if necessary (p. xx).



### ■ Using the FM radio function

The transceiver has a function to receive an FM radio broadcast.

- ① The receiving frequency is settable in 100 kHz step.
- ① Other functions related to the transmitting is disabled while using the FM radio function.

#### Example: Receiving 90.5 MHz

- ① The bands used for FM radio broadcasting differ, depending on the country or region.
  1. Push [V/M/C] to select the VFO mode.
  2. Push [BAND] to select the FM radio mode.
  3. Enter the FM radio frequency to receive.
    - ① The S/Rf meter displays the received signal strength.



## ■ Setting a frequency

### ◇ Selecting a tuning step

When you select the frequency by rotating [DIAL] in the VFO mode, it changes in the selected tuning step.

1. Push [SET] to enter the Set mode.  
• A Set mode item is displayed.
2. Push [SET] several times to select "tS."



3. Rotate [DIAL] to select a tuning step.

#### Selectable tuning step (kHz):

5.0	10.0	12.5	15.0	20.0	25.0
30.0	50.0	100.0	125.0	200.0	/

① The selected tuning step will also be applied to the VFO scan function.

4. Push [V/M/C] to exit the Set mode.



### ◇ Setting a frequency

Set a frequency using the keys [0] to [9], [.] , and then push [ENT] on the Ten-Keypad.

① The frequency display is reset if you enter a frequency outside the operating range.

1. Push [V/M/C] to select the VFO mode.
2. Set the frequency using the Ten-Keypad.

#### Setting example:

##### Setting 433.580 MHz:

- Push [4], [3], [3], [5], [8], [0], and then push [ENT].

##### Changing 433.580 MHz to 440.000 MHz:

###### (Setting the frequency under 10 MHz)

- Push [4], [0], [.] , [0], [0], [0], and then push [ENT].

##### Changing 433.580 MHz to 433.140 MHz:

###### (Setting the frequency under 100 MHz)

- Push [.] , [1], [4], [0], and then push [ENT].

**NOTE:** The 1 kHz digit may not be settable using the Ten-keypad, depending on the Tuning Step settings. Set [0] to the 1kHz step, and then rotate [DIAL] to set.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

## 3 BASIC OPERATION

### ■ Transmitting

#### ◇ Making a simplex call

⚠ **WARNING! NEVER** transmit for long periods of time. During prolonged transmissions at high power or mid-power, the transceiver radiates heat to protect itself from overheating. The transceiver's chassis will become hot and may cause a burn. To prevent the transceiver's overheating, the default setting of the time-out timer function is set to 5 minutes. Be careful when the time-out timer function is turned OFF or set to a long time period, and you transmit for long periods.

**CAUTION: DO NOT** operate the transceiver where heat dissipation will be obstructed if the transceiver is also being charged with an external power supply. Poor heat dissipation may cause a burn, warp the casing, or damage the transceiver.

**CAUTION: DO NOT** transmit without an antenna.

**NOTE:** When the transceiver becomes hot, the transceiver's heat protection function gradually reduces the output power to approximately 2.5 watts, then it stops transmission after that. This is done to protect the transceiver itself until it can cool down.

**NOTE:** You can transmit on only the amateur frequency bands.

**IMPORTANT:** Before transmitting, monitor the operating frequency to make sure transmitting won't cause interference to other stations on the same frequency.

1. Rotate [DIAL] to set the operating frequency.
2. Push [H/M/L] several times to select an output power.
  - ① Select a level to suit your operating requirements.
  - ① "M" or "L" is displayed when a middle power or low power is selected.
  - ① When you select a high power, the power icon disappears.
3. Hold down [PTT] to transmit, and speak into the microphone at your normal voice level.
  - The TX/RX indicator lights red.
  - The S/RX meter displays the output power level.
4. Release [PTT] to receive.

**TIP: To maximize the readability of your signal**

1. After pushing [PTT], pause briefly before you start speaking.
2. Hold the microphone 5 to 10 cm (2 to 4 inches) from your mouth, then speak at your normal voice level.

◇ **About the transmit power levels**

- When an external DC power cable (13.5 V DC) is connected, or a BP-280 is used:  
Approximately 5 W (High) /2.5 W (Mid) /0.5 W (Low)



Low



Middle



High

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

## ■ Specifications Measurements made without an antenna.

① All stated specifications are subject to change without notice or obligation.

### ◇ General

- Frequency coverage (unit: MHz):

USA/EXP version

FM Radio

88.00 ~ 108.00 MHz

FM (VHF/UHF)

Receive: 136.000 ~ 174.000 (Guaranteed only 144 ~ 148 MHz)

400.000 ~ 479.000 (Guaranteed only 440 ~ 450 MHz)

Transmit: 144.000 ~ 148.000

440.000 ~ 450.000

EXP version

FM Radio

76.00 ~ 108.00 MHz

FM (VHF/UHF)

Receive: 136.000 ~ 174.000 (Guaranteed only 144 ~ 148 MHz)

400.000 ~ 479.000 (Guaranteed only 430 ~ 450 MHz)

Transmit: 144.000 ~ 148.000

430.000 ~ 450.000

EUR version

FM Radio

76.00 ~ 108.00 MHz

FM (VHF/UHF)

Receive: 136.000 ~ 174.000 (Guaranteed only 144 ~ 146 MHz)

400.000 ~ 479.000 (Guaranteed only 430 ~ 440 MHz)

Transmit: 144.000 ~ 146.000

430.000 ~ 440.000

- Modes: FM/FM-N (F2D/F3E)
- The number of Memory channels: 200 channels
- Usable temperature range:  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ,  $-4^{\circ}\text{F} \sim +140^{\circ}\text{F}$
- Tuning steps: 5, 10, 12.5, 15, 20, 25, 30, and 50 kHz
- Frequency stability:  $\pm 2.5$  ppm ( $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ,  $-4^{\circ}\text{F} \sim +140^{\circ}\text{F}$ )
- Power supply: 7.2 V DC nominal
- Current drain:
  - Transmit 2.5 A or less
  - Receive (Maximum output) 600 mA or less
- Antenna connector: SMA (50  $\Omega$ )
- Dimensions:
  - (projections not included) 52.2 (W)  $\times$  111.8 (H)  $\times$  30.3 (D) mm,
  - 2.1 (W)  $\times$  4.4 (H)  $\times$  1.2 (D) inches
- Weight (approximate): 270 g, 9.5 oz (Including battery pack)

## ◇ Transmitter

- Modulation system: Frequency shift keying modulation
- Output power (at 7.2 V DC): High: 5.0 W, Mid: 2.5 W, Low: 0.5 W
- SAR 10g: XXX W/kg
- Maximum frequency deviation:
  - FM ±5.0 kHz (FM), ±2.5 kHz (FM-N)
- Spurious emissions:
  - 60 dBc or less at High/Mid
  - 13 dBm or less at Low
- Microphone impedance: 2.2 kΩ

## ◇ Receiver

- Receive system: Direct Conversion
- Sensitivity: –15 dBμ V or less (at 12 dB SINAD)
- Audio output power:
  - Internal speaker 1.5 W or more at 10% distortion into an 8 Ω load
  - External speaker 0.55 W or more at 10% distortion into an 8 Ω load
- Selectivity:
  - FM 55 dB or more
  - FM-N/DV 50 dB or more
- Spurious and image rejection ratio:
  - 60 dB or more
- Squelch Sensitivity: –15dBμV or less (threshold)

## ■ About CE and DOC



Hereby, Icom Inc. declares that the versions of IC-T10 which have the “CE” symbol on the product, comply with the essential requirements of the Radio Equipment Directive, 2014/53/EU, and the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://www.icomjapan.com/support/>

## ■ Disposal



The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

